

REMARKS/ARGUMENTS

The rejections presented in the Office Action dated January 31, 2006 (hereinafter Office Action) have been considered. Claims 1-94 remain pending in the application. Applicants appreciate the allowance of claims 63-66 and 88-89. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 10-11, 28-38, and 54-58 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which Applicants regards as their invention. The Examiner states as to claims 10-11, 28, and 54-58, that the claims are indefinite because there is no antecedent basis for the limitation "template" in these claims since "template" is not introduced in claims 1, 9, or 39 on which claims 10-11, 28, and 54-58 are dependent.

Applicants respectfully disagree. There is no requirement that terms in dependent must be initially introduced in the independent claims. Applicants submit that the use of the article "a" or "an" preceding the term "template" in claims 10-11, 28-38, and 54-58 provides the appropriate introduction for the initial use of the term to establish antecedent basis. Applicants further submit that these claims are not indefinite.

Claims 1, 3-9, 13, 16-21, 23-24, 39, 41-43, 48-50, 52, 73-76, 78-82, 84-87, 90 and 92-93 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,275,731 to *Zhu* (hereinafter "*Zhu*").

Applicants respectfully disagree with the Examiner's characterization of *Zhu* and the contention that *Zhu* anticipates these claims. Applicants respectfully assert that several features recited in the rejected claims are not disclosed in *Zhu*.

To anticipate a claim, the asserted reference must clearly and unequivocally disclose every element of the claimed invention. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. All claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102.

Independent claims 1, 39, 73, 90, and 92 recite, in some form defining a plurality of classification windows relative to and following a pacing pulse. Zhu does not teach or suggest a plurality of classification windows following a pacing pulse. Instead of a plurality of classification windows *following* the pacing pulse, Zhu teaches a “prelook” which includes first and second preset time intervals *prior to* transmitting a pulse. (See claim 1)

Further, independent claims 1, 39, 73, 90, and 92 recite in some form that classification of the cardiac response is dependent on one or more detected characteristics of the cardiac signal and the particular classification windows in which the characteristics are detected. Zhu also does not teach or suggest this feature.

For at least the aforementioned reasons, Zhu does not teach or suggest all of the claim limitations of independent claims 1, 39, 73, 90, and 92, thus claims 1, 39, 73, 90, and 92 are not anticipated by Zhu. Dependent claims 3-9, 13, 16-21, 23-24, 41-43, 48-50, 52, 74-76, 78-82, 84-87, and 93 are also not anticipated by Zhu as these claims depend from base claims 1, 39, 73, 90, or 92 that are patentably distinct for reasons discussed above.

Claims 10-12, 28-38, 44-45, 54-58 and 61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zhu in view of U.S. Publication No. 2003/0050671 by *Bradley* (hereinafter “Bradley”). Claims 2, 14, 222, 25, 40, 46-47, 51, 53, 59-62, 69, 77, 83, 91 and 94 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zhu in view of U.S. Patent No. 6,512,953 to *Florio* (hereinafter “Florio”). Claim 26 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Zhu in view of U.S. Patent No. 6,950,702 to *Sweeney* (hereinafter “Sweeney”). Claims 15, 27, 67-68, 70-72 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zhu in view of Florio, as applied to claims 2, 22 and 59, and further in view of U.S. Publication No. 2004/0171959 to *Stadler* (hereinafter “Stadler”).

The Examiner’s rejections are based on the assertion that Zhu teaches the invention substantially as claimed with reliance on Bradley, Florio, Sweeney, or Stadler to teach various other limitations.

References used in combination to support an obviousness rejection under 35 U.S.C. §103(a) must teach or suggest all the claim limitations. MPEP § 2142. Applicants

respectfully traverse each of the above rejections since the prior art fails to disclose all the claim limitations. In addition, there would be no motivation to combine the references as proposed by the Examiner, and there is no evidence or expectation that any such combination would successfully result in Applicants' invention.

As set forth in arguments above, Zhu fails to teach or suggest the use of two separate windows following delivery of the pacing pulse for capture status classification. Zhu also fails to teach or suggest classification based on detection of a cardiac signal feature and the particular classification window in which the feature is detected. None of the references cited by the Examiner teach at least these limitations. Because the asserted combinations of references fails to teach or suggest the above-identified limitations, and because the asserted combinations do not provide a sufficient basis to support a reasonable expectation of success or the requisite suggestion or motivation to combine or modify the references in the manner suggested by the Examiner, Applicants respectfully assert that the Examiner has failed to establish *prima facie* obviousness of Applicants' subject matter.

Examiner states that the use of a reference value of 50% of a captured response template peak and the classification of near non-captured responses are obvious matters of design choice. It would appear that the Examiner is impermissibly taking official notice of limitations of Applicants' claims 22, 51, 61, 71, and 83. The use of a predetermined percentage (50%) of a captured response template peak for capture status classification does not constitute facts outside of the record which are capable of instant and unquestionable demonstration as being well known or obvious to one skilled in the art.

Furthermore, detecting near non-capture using through the use of a plurality of classification windows is not a fact which is capable of instant and unquestionable demonstration. As stated in the specification at page 43, line 16, detection of a near non-captured response indicates that the pacing stimulation is captured but delayed. Thus, Examiner's assertion that the use of detection of near non-capture does not provide an advantage, is used for a particular purpose, or solves a stated problem is in error because this feature provides additional information about the capture status of a cardiac beat.

Classification of a near non-captured response is not an obvious matter of design choice and also is not taught or suggested in any of the reference cited by the Examiner.

Consistent with MPEP § 2144.03, Applicants respectfully request evidence in support of the proposition that such teachings are well known in the prior art and that there is adequate evidence of motivation to combine these officially noticed "facts" with the Zhu and Florio references.

It is to be understood that Applicants do not acquiesce to Examiner's characterization of the asserted art or Applicants' claimed subject matter, nor of the Examiner's application of the asserted art or combinations thereof to Applicants' claimed subject matter. Moreover, Applicants do not acquiesce to the Examiner's statements or conclusions concerning what would have been obvious to one of ordinary skill in the art, obvious design choices, common knowledge at the time of Applicants' invention, officially noticed facts, and the like. Applicants reserve the right to address in detail the Examiner's characterizations, conclusions, and rejections in future prosecution.

Applicants respectfully assert that none of the claims in the application are anticipated or obvious in view of the references asserted by the Examiner and that the application is in condition for allowance. If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact her at the telephone number listed below to discuss any issues related to this case. Authorization is given to charge Deposit Account No. 50-3581 (GUID.045PA) any necessary fees for this filing.

Respectfully submitted,

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